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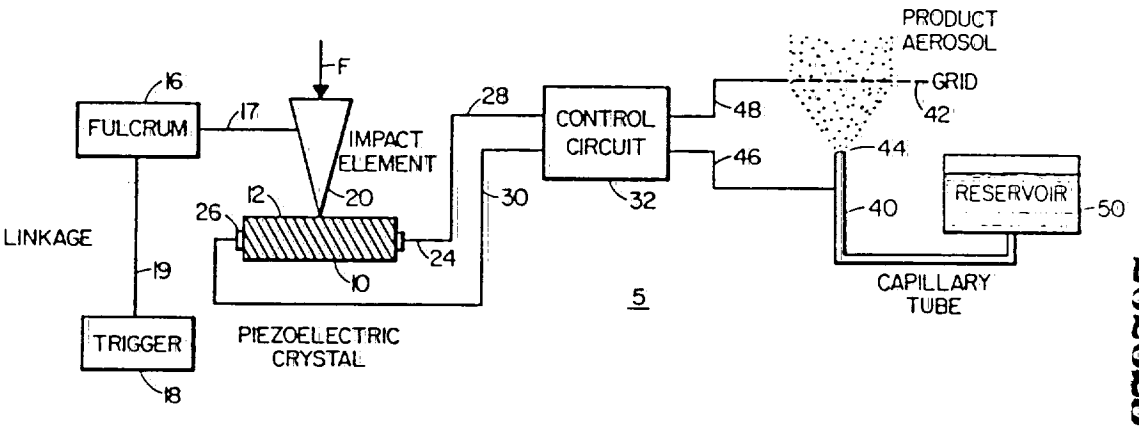

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(57) Abstract

The present invention relates to a portable nebulizer capable of producing a finely divided aerosol having uniformly sized droplets. The nebulizer includes a source of fluid (50) such as a capillary tube (40) coupled to a fluid reservoir (50) to which a high voltage is applied in order to generate the aerosol by electrical atomization. The nebulizer further includes a piezoelectric crystal (10) and a mechanism (16, 17, 18, 19, 20) for deforming the crystal (10) so as to generate the required voltage. By using electrical atomization to generate the aerosol and by piezoelectrically generating the voltage required for atomization, a nebulizer is provided which may be of small size so as to be suitable for hand held operations yet is capable of producing measured amounts of finely divided aerosols which are substantially monodispersed.

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